

## **11:709:352:01 Nutrition and Behavior**

Spring 2017

Index # 12711

Tuesdays 9:15AM–12:15PM

206 Ruth Adams Building

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Office Hours: By arrangement

The relationship between nutrition and behavior is assuredly bi-directional. There is compelling evidence that nutritional status or even the intake of specific nutrients can influence behavior. Conversely, behavior can affect nutritional status through our acceptance of some foods but our rejection of others. Moreover, numerous contextual factors influence when, what, and how much we eat.

### **Learning objectives**

The primary goal of this course is to familiarize you with the diverse literature on nutrition and behavior and the methodologies used in such research. Upon completion of this course, students will be able to list and explain:

- a. the major questions being asked today in nutrition and behavior research;
- b. areas of controversy in nutrition and behavior research; and
- c. relevant theories that explain nutrition and behavior relationship

In addition, students will have:

- d. assessed their own eating style through standardized instruments;
- e. prepared an evidence-based explanation of their motivations for eating; and
- f. critically analyzed two empirical studies so as to prepare a cogent argument for the validity of their findings

Your participation in this class will be expected and count toward your grade. To encourage your active engagement, there are a number of assignments that involve your thinking about the course material outside the classroom. Approximately half of each weekly meeting will consist of my lecturing on the topic of the week, although your questions and comments are certainly encouraged. Following a brief break, the second half of each class may be reserved for exercises, occasional experiments, and discussion of the class assignments. Over the last six weeks of the semester class time will be devoted to your own presentations in a “mock” debate. Your participation is therefore very critical to the success of the course, and includes your regular attendance, prompt arrival, and contribution to our weekly meetings, but especially your sharing responsibility for taking one side of the nutrition–behavior issue that will be debated during a specific week near the end of the semester.

### **Course Readings**

Worobey, J., Tepper, B.J., & Kanarek, R.B. (2015). *Nutrition and behavior: A multidisciplinary approach* (2<sup>nd</sup> ed.). Oxfordshire, UK: CABI Publishing. (Available at the Barnes and Noble Bookstore, at the intersection of College Avenue and Somerset Street, College Avenue Campus)

Additional readings as provided in class.

### Course requirements

1. Food and mood exercise [5%]	10 points
2. Motivations to eat exercise [5%]	10 points
3. Short paper on choice of 1 or 2 above [15%]	30 points
5. Mid-term examination [25%]	50 points
6. "Debate" assignment [20%]	40 points
7. Final examination [25%]	50 points
8. Attendance [5%]	<u>10 points</u>
	200 points

Details regarding the preceding will be described this morning and in later classes. Class participation will be considered at semester's end for students whose performance may border on a higher grade.

### Grading scale

90 – 100	A	70 – 76	C
87 – 89	B+	60 – 69	D
80 – 86	B	≤ 59	F
77 – 79	C+		

### Important

It is to your advantage to attend class regularly, arrive promptly, and to take whatever notes you deem necessary. Please be forewarned that I do **not** post my *PowerPoint* slides on SAKAI. Rather, you should make a friend of a conscientious classmate (or two), so that if you miss a class you will have someone from whom you can borrow notes.

### Note to Students re: Academic Integrity

Each and every year, numerous Rutgers students are suspended, expelled or receive failing grades due to violations of academic integrity. Many of the students who are caught cheating were unaware of the consequences or even unaware that their actions constituted cheating at all. For your own protection please read the university's Academic Integrity Policy. <http://academicintegrity.rutgers.edu/integrity.shtml>

Date	Tentative Topics/Reading Assignments/Exercises
Jan 17	Introduction, overview, concepts, and models in nutrition and behavior <i>Reading assignment</i> – Chapters 1 and 2
Jan 24	Research methods and analytic strategies <i>Reading assignment</i> – Chapter 3 <i>[Exercise 1- Breakfast and mood- distributed]</i>
Jan 31	Effects of nutrition on behavior: Lipids and neurotransmitters <i>Reading assignment</i> – Chapter 4 <i>Exercise 1 due:</i> Breakfast and mood discussion

<b>Date</b>	<b>Tentative Topics/Reading Assignments/Exercises</b>
Feb 7	Effects of nutrition on behavior: Neurotransmitters <i>Reading assignment</i> – Chapter 5 <i>[Exercise 2- Motivations to eat- distributed]</i>
Feb 14	Bio-behavioral and psychosocial influence on nutrition <i>Reading assignment</i> – Chapter 10 <b><i>Exercise 2 due:</i></b> Motivations to eat discussion <i>[Paper instructions distributed]</i>
Feb 21	Effects of undernutrition <i>Reading assignment</i> – Chapter 6 <i>[Debate instructions and team assignments; review for exam]</i>
Feb 28	<b><i>Mid-term examination</i></b>
Mar 7	Minerals and behavior <i>Reading assignment</i> – Chapter 8 <b><i>Papers due</i></b>
Mar 14	<i>No class – Spring Break</i>
Mar 21	Vitamins and behavior <i>Reading assignment</i> – Chapter 7 <b><i>Debate 1:</i></b> <i>Can B12 supplements reduce cognitive deficits in the elderly?</i> <b><i>Debate 2:</i></b> <i>Do children’s MVM supplements boost school achievement?</i>
Mar 28	Dietary supplements and mental functioning <i>Reading assignment</i> – Chapter 9 <b><i>Debate 3:</i></b> <i>Does ginkgo biloba improve memory?</i> <b><i>Debate 4:</i></b> <i>Is St. John’s wort an effective antidepressant?</i>
Apr 4	Stimulants and depressants: Caffeine and alcohol <i>Reading assignment</i> – Chapters 12 and 13 <b><i>Debate 5:</i></b> <i>Should energy drinks be allowed to be sold to minors?</i> <b><i>Debate 6:</i></b> <i>Does alcohol use promote risky sexual behavior?</i>
Apr 11	Sugar, food additives, and behavior <i>Reading assignment</i> – Chapter 11 <b><i>Debate 7:</i></b> <i>Do food dyes cause hyperactivity?</i> <b><i>Debate 8:</i></b> <i>Are artificial sweeteners effective in weight loss?</i>

<b>Date</b>	<b>Tentative Topics/Reading Assignments/Exercises</b>
Apr 18	Factors promoting eating disorders <i>Reading assignment</i> – Chapter 14 <i>Debate 9: Do media influences promote eating disorders?</i> <i>Debate 10: Is maternal dieting a cause of eating disorders in daughters?</i>
Apr 25	Behavioral aspects of overweight and obesity Reading assignment – Chapter 15 <i>Debate 11: Do restrictive feeding practices promote child overeating?</i> <i>Debate 12: Does food insufficiency contribute to weight gain?</i>
May 2	<i>No class – Reading day</i>
May 9	<i>Final examination – 9-11 AM</i>

